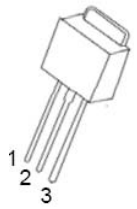
78M09

PUOLOP 迪浦

Three-terminal positive voltage regulator

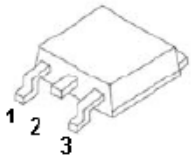
TO-251-3L
TO-252-2L



1.IN

2.GND

3.OUT



FEATURES

Maximum output current I_{OM}: 0.5 A
Output voltage V_o: 9V
Continuous total dissipation
P_D: 1.25 W (Ta = 25 ℃)

ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	25	V
Operating Junction Temperature Range	T_{OPR}	0-+125	℃
Storage Temperature Range	T_{STG}	-65-+150	℃

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JINCTION TEMPERATURE (Vi=16V, Io=350mA,C_i=0.33μF,Co=0.1μF, unless otherwise specified)

Pa rameter	Symbol	Test conditions		Min	Typ	Max	Unit
Output Voltage	Vo		25℃	8.65	9	9.35	V
		11.5≤V_i≤24V, Io=5mA-350mA, Po≤ 15W	0-125℃	8.55	9	9.45	V
Load Regulation	ΔVo	Io=5mA-500mA	25℃		20	180	mV
		Io=5mA-200mA	25℃		10	90	mV
Line Regulation	ΔVo	11.5V≤V_i≤26V, Io=200mA	25℃		6	100	mV
		12V≤V_i≤26V, Io=200mA	25℃		2	50	mV
Quiescent Current	Iq		25℃		4.6	6	mA
Quiescent Current Change	ΔIq	11.5V≤V_i≤26V, Io=200mA	0-125℃			0.8	mA
	ΔIq	5mA≤I_O≤350mA	0-125℃			0.5	mA
Output Noise Voltage	V_N	10Hz≤ f ≤100KHz	25℃		60		μV
Ripple Rejection	RR	13≤V_i≤23V,f=120Hz,Io=300mA	0-125℃	56	80		dB
Dropout Voltage	Vd	Io=350mA	25℃		2		V
Short Circuit Current	Isc	Vi=16V	25℃		250		mA
Peak Current	Ipk		25℃		0.5		A

TYPICAL APPLICATION